

WHAT IS CLAIMED:

1. a tire inflation and handling assistance device comprising:

a support member;

a hub engagement and stop structure supported by said
5 support member and pivotable between a first position for
supporting a hub and tire assembly in a substantially
horizontal position and a second position for supporting a
hub and tire assembly in a tilted position at least one of
adjacent or touching the ground, to facilitate at least one
10 of a hub and tire assembly handling and hub and tire
assembly sealed pressurization.

2. The tire inflation and handling assistance device
as recited in claim 1 wherein an angle of pivot between said
first position and said second position is in the range of
from about of from about 50 degrees to about 75 degrees of
5 displacement from a horizontal position to enable a hub and
tire assembly to be tilted to and from engagement with said
a hub engagement and stop structure and to enable said a hub
engagement and stop structure and supported hub and tire
assembly to and from a horizontal position.

3. The tire inflation and handling assistance device as recited in claim 1 wherein an angle of pivot between said first position and said second position is in the range of from about 55 degrees to about 70 degrees of displacement from a horizontal position to enable a hub and tire assembly to be tilted to and from engagement with said a hub engagement and stop structure and to enable said a hub engagement and stop structure and supported hub and tire assembly to and from a horizontal position.

4. The tire inflation and handling assistance device as recited in claim 1 wherein an angle of pivot between said first position and said second position is about 65 degrees of displacement from a horizontal position to enable a hub and tire assembly to be tilted to and from engagement with said a hub engagement and stop structure and to enable said a hub engagement and stop structure and supported hub and tire assembly to and from a horizontal position.

5. The tire inflation and handling assistance device as recited in claim 1 wherein said horizontal position is stably supported.

6. The tire inflation and handling assistance device as recited in claim 5 wherein said stable support of said horizontal position is achieved by having a center of gravity of at least one of said hub and tire assembly, said
5 a hub engagement and stop structure, and a combination of said a hub engagement and stop structure and said hub and tire assembly to one side of a pivot axis of said a hub engagement and stop structure in a direction of said horizontal position.

7. The tire inflation and handling assistance device as recited in claim 1 wherein said a hub engagement and stop structure further comprises at least three plate sections for supporting said hub and tire assembly at a center of said hub and tire assembly.

8. The tire inflation and handling assistance device as recited in claim 1 wherein said a hub engagement and stop structure is designed to extend at least partially through an opening of a hub and tire assembly.